AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claims 1-39 (canceled).

40. (currently amended) A terminal that is capable of performing QoS control, comprising:

a monitor module configured to collect QoS information of the terminal and monitors whether QoS statistics exceed predetermined threshold values;

a communication module configured to report the QoS information collected by the monitor module to a central controller connected to said terminal via the network and receive QoS enforcement instructions from the central controller via the network; and

an enforcement module configured to regulate a behaviour of the terminal ~~according to the QoS enforcement instructions received by the communication module~~,

wherein, when the communication module receives the QoS enforcement instructions, the enforcement module performs traffic regulation according to the QoS enforcement instructions, and

wherein, when the monitor module detects threshold violation where the QoS statistics exceed the predetermined threshold values, the enforcement module performs traffic regulation to correct the threshold violation based on the QoS information collected by the monitor module.

41. (previously presented) The terminal according to claim-40, wherein the monitor module collects the QoS information on Individual service sessions.

42. (currently amended) The terminal according to claim 40, wherein the enforcement module compares a value indicated by the QoS enforcement instructions to a current measurement indicated by the QoS information collected ~~measured~~ by the

monitor ~~monitoring~~ module, and ~~adjusts QoS parameters to~~ regulates the behaviour of the terminal if <u>the current measurement is less than the value</u> ~~necessary~~.

43. (previously presented) The terminal according to claim 40, wherein the enforcement module comprises at least any one of the following means:

means for classifying packets into different priorities within the terminal;

means for managing dropping of packets within the terminal when resource quota allocated to the terminal is used up;

means for reducing congestion at the terminal by lowering a transmission rate;

means for reducing congestion at the terminal by delaying transmission of packets when insufficient resource is allocated to the terminal;

means for terminating sessions and stopping transmission of packets;

means for reducing outgoing traffic by limiting total number of outgoing sessions;

means for reducing incoming traffic by limiting total number of incoming sessions; and

means for reducing incoming traffic by requesting for less incoming traffic.

44. (currently amended) A communication system comprising:

<u>a communication network;</u>

a terminal that is capable of performing QoS control;

a central database <u>connected to said communication network and</u> configured to store subscription information of a user who uses the terminal and service level agreement information; and

a central controller <u>connected to said communication network and</u> configured to accept QoS reports on QoS information from the terminal and give QoS enforcement instructions to the terminal according to the QoS information, the subscription information and the service level agreement information stored in the central database,

wherein the terminal comprises:

a monitor module configured to collect the QoS information of the terminal and monitor whether QoS statistics exceed predetermined threshold values,<u>[</u>[;]]

a communication module configured to report the QoS information collected by the monitor module to the central controller and receive the QoS enforcement instructions from the central controller,[[;]] and

an enforcement module configured to regulate a behaviour of the terminal according to the QoS enforcement instructions received by the communication module;[[,]]

wherein, when the communication module receives the QoS enforcement instructions, the enforcement module performs traffic regulation according to the QoS enforcement instructions received by the communication module, and

wherein, when the monitor module detects threshold violation where the QoS statistics exceed the predetermined threshold values, the enforcement module performs traffic regulation to correct the threshold violation based on the QoS information collected by the monitor module.

45. (currently amended) A communication method in a communication system, wherein the communication system comprises a network, a terminal connected to the network with a QoS control module that is capable of performing QoS control; a central database connected to the network and configured to store subscription information of a user who uses the terminal and service level agreement information; and a central controller connected to the network and configured to accept QoS reports on QoS information from the terminal and give QoS enforcement instructions to the terminal,

the communication method comprising:

a step where the QoS control module collects QoS information of the terminal and monitors whether QoS statistics exceed predetermined threshold values;

a step where the QoS control module reports the collected QoS information to the central controller;

a step where the central controller accepts QoS reports on the QoS information from the QoS control module;

a step where the central controller generates QoS enforcement instructions according to the QoS information received from the QoS control module, the

subscription information and the service level agreement information stored in the central database;

a step where the central controller sends the QoS enforcement instructions to the QoS control module;

a step where the QoS control module regulates a behaviour of the terminal according to the QoS enforcement instructions received from the central server;

a step where, when the QoS control module receives the QoS enforcement instructions, the QoS control module performs traffic regulation according to the QoS enforcement instructions; and

a step where, when the QoS control module detects threshold violation where the QoS statistics exceed the predetermined threshold values, the QoS control module performs traffic regulation to correct the threshold violation based on the QoS information collected by the QoS Control module.

46 (new) The terminal according to claim 40,

wherein the terminal embeds QoS control capability information in a session control message and sends this information to a session control server during session initiation, and

wherein the terminal, in case that the central controller initiates a monitor session when the session control server detects the QoS control capability information, informs the central controller and then replies to the terminal with a QoS control capability embedded in an acknowledgement message, initiates the QoS control module when the acknowledgement message contains the QoS control capability information, and

whereby a communication channel between the QoS control module in the terminal and the central controller for performing QoS control is established.

47 (new) The terminal according to claim 40,

wherein the terminal requests for a QoS control service during an access control process when the terminal attaches to a network, and

wherein the terminal, in case that the central controller initiates a monitor session when an access control server informs the central controller of the QoS control service

request and then replies to the terminal with an access control reply with tunnelling channel information, receives the tunneling channel information is received,

whereby a tunneling channel is set up between the QoS control module at the terminal and the central controller using the tunneling channel information, and

whereby a communication channel between the QoS control module in the terminal and the central controller for performing QoS control is established.

48 (new) The system according to claim 44,

wherein the terminal embeds QoS control capability information in a session control message and sends this information to a session control server during session initiation,

wherein the central controller initiates a monitor session when the session control server detects the QoS control capability information and informs the central controller,

wherein the central controller replies to the terminal with a QoS control capability embedded in an acknowledgement message, and

wherein the terminal initiates the QoS control module when the acknowledgement message contains the QoS control capability information,

whereby a communication channel between the QoS control module in the terminal and the central controller for performing QoS control is established.

49 (new) The system according to claim 44,

wherein the terminal requests for a QoS control service during an access control process when the terminal attaches to a network,

wherein the central controller initiates a monitor session when an access control server informs the central controller of the QoS control service request,

wherein tunnelling channel information is allocated and embedded into an the access control reply by the central controller, and

wherein the tunnelling channel information is received, and a the tunnelling channel is set up between the QoS control module at the terminal and the central controller using this information,

whereby a communication channel between the QoS control module in the terminal and the central controller for performing QoS control is established.

50 (new) The communication method according to claim 45, further comprising:

a step where the terminal embeds QoS control capability information in a session control message and sends this information to a session control server during session initiation;

a step where the central controller initiates a monitor session when the session control server detects the QoS control capability information and informs the central controller;

a step where the central controller replies to the terminal with a QoS control capability embedded in an acknowledgement message; and

a step where the terminal initiates the QoS control module when the acknowledgement message contains the QoS control capability information,

whereby a communication channel between the QoS control module in the terminal and the central controller for performing QoS control is established.

51 (new) The communication method according to claim 45, further comprising:

a step where the terminal requests for a QoS control service during an access control process when the terminal attaches to a network;

a step where the central controller initiates a monitor session when an access control server informs the central controller of the QoS control service request;

a step where tunnelling channel information is allocated and embedded into an the access control reply by the central controller; and

a step where the tunnelling channel information is received, and a the tunnelling channel is set up between the QoS control module at the terminal and the central controller using this information,

whereby a communication channel between the QoS control module in the terminal and the central controller for performing QoS control is established.